



CONNECTIONS

Fulton County Public Works' Quarterly Newsletter



IN THIS ISSUE

Clean Water Week 2020
Pg. 1

Director's Corner
Pg. 2

Rain Barrel Giveaways for Fulton
County Residents Pg. 3

Big Creek Rain Report
Pg. 4

Little River Update
Pg. 5

Seasonal Taste and Odor Issues in
Water Supply Pg. 5

Merk Road Bank Stabilization
Project Pg. 6

Keeping Our County Clean: FCPW Celebrates Clean Water Week 2020

By: Kelli L. Edwards

On October 18, 1972, the Federal Water Pollution Control Act was amended and became commonly known as the Clean Water Act. For over 48 years, America has celebrated the Clean Water Act through community advocacy, awareness campaigns, and community cleanups, each designed to encourage participation in the fight against pollution. These events have culminated into a week-long celebration known as Clean Water Week.

For this year's celebration, the PEO team coordinated a departmental cleanup at Burdett Park in the City of South Fulton on Friday, October 23, 2020. In partnership with City of South Fulton District 5 Councilman Corey Reeves, the South Fulton Chamber of Commerce, and Keep South Fulton Beautiful, the Fulton County Department of Public Works removed an abundance of trash, debris, and discarded tires.

Despite the huge success of the cleanup, this is just the beginning of a long and fruitful partnership with the City of South Fulton as we work together to keep Fulton County Clean. As a result of this cleanup, the PEO team has been asked to facilitate an Adopt-A-Stream monitoring workshop for the District 5 MeWe Green Team with Councilman Reeves. We are pleased to foster stewardship among our county residents and look forward to this environmental advocacy continuing.

This is just one of the ways that the Fulton County Department of Public Works pays it forward! For more information about Clean Water Week, the Georgia Adopt-A-Stream program, and more opportunities for community engagement, contact Kelli L. Edwards at Kelli.Edwards@fultoncountyga.gov.



Director's Corner



David E. Clark, P.E.

As 2020 starts to draw to a close, I am sure that most will agree that it is one year that few of us would ever like to repeat and will be very happy when we can hang up that new 2021 Art Calendar that Corlette and her staff will be passing out before long. However, through it all, Public Works staff continues to outperform and rise above expectations. Whereas 2020 may be long remembered for COVID-19, zoom meetings, home schooling, tropical storms, and political challenges, it will also be remembered for how Public Works:

- Successfully started-up the operation of Fulton County's 2nd membrane wastewater treatment facility at Little River;
- Began construction activities for the Big Creek wastewater treatment facility expansion;
- Made incredible strides in reducing Inflow and Infiltration into the collection system;
- Implemented residential water meters utilizing an Advanced Metering Infrastructure (AMI);
- Reconstructed the old Runway 9/27 into a taxiway with the start of the construction of the Norfolk Southern hangar on the North Terminal Area;
- Developed a multi-year resurfacing program throughout the Fulton Industrial District, and
- Stepped up to assist with Elections responsibilities in a wide variety of roles.

Plus the countless normal tasks that we do each and every day for the citizens of Fulton County both in-person and in the creative ways we learned to do a lot of functions remotely.

As the calendar turns to 2021, hopefully Fulton County will get back to some sense of normalcy. The proposed 2021 budget does include funding for the implementation of the Incremental Compensation Strategy (ICS) that was delayed in 2020. Additionally, I suspect that the Pay-for-Performance program will be reformatted to better reflect our 2021 goals. Of course, on a Public Works level, in 2021, we have plans for some highly visible water, wastewater, airport, and transportation projects.

Thank you all for your commitment to Public Works and Fulton County throughout the past year and I know that you will all be equally committed no matter what 2021 throws at us.

Upcoming Events

November 26th & 27th
FC Thanksgiving Holidays

December 9th 6:00pm
Winterization Webinar
Zoom Presentation

December 16th
2020 Art Calendar Contest

December 24th & 25th
FC Christmas Holiday

Dec. 31st & Jan 1st
FC New Year's Holiday

Congratulations Retirees! Thank you for your years of service to Fulton County!



Richard Crawley, Kenny Byrom, and Gary Sargent are recognized for their dedication and years of service for Public Works upon their retirement.

Welcome Back to Fulton County Public Works : Belinda Napper



Development Site Inspector, Supervisor

Rain Barrel Giveaways for Fulton County Residents

By: Amy Warnock



With the limitations of COVID-19 protocols and with many students still learning remotely, the efforts of the Public Education and Outreach (PEO) team have been focused largely on creating digital resources for our residents to use. Over the past months, we have created new educational videos for homeowners, teachers, students, and families. We have conducted

phone and video programs for seniors, septic tank webinars for realtors and homeowners, and even virtual summer camps. Over the past couple of months we have adapted one of our most popular face-to-face workshops, our rain barrel workshops, to fit into our socially distanced world and we have given away just over 100 rain barrels and installation kits.

Rain barrels are great for homeowners, plants, and the environment. Capturing rainwater to use on plants slows the flow of stormwater runoff, reduces the use of potable water supplies for outdoor watering, and provides plants with the untreated and slightly acidic water that they prefer. Each rain barrel workshop included a Zoom presentation where participants learned about the importance of conservation in our region and the benefits of rain barrels, as well as the basics of installing a rain barrel. Zoom presentations were held on week-day evenings, and then participants drove in to pick up their barrels on Saturday morning. Participants also received a printed set of installation instructions and a link to a step-by-step installation video created by the PEO team.



Workshops were held throughout Fulton County from Alpharetta to South Fulton, in partnership with the City of Sandy Springs, City of Alpharetta, and the Fulton County Cooperative Extension. Our October workshops, promoted as “Virtual Fall Planting Festivals”, included presentations from Extension staff on composting and integrated pest management for gardeners. Participants were excited to have the opportunity to conserve water, save a little money, and start planning their gardens for this year and next.

Public Works By the Numbers July-September 2020

Water Resources	30.84 MGD	Total Potable Water Distributed (average day)
	3.20%	Non-Revenue Water (annualized)
	363	Small Meters Replaced
	50.52 MGD	Total Wastewater Treated (average day)
	177.18 Acres	Sewer Easement Cleared
	17.56 MG	Reuse Water Provided (JCEC)
	12.18 MG	Reuse Water Provided (Little River)
	553	Water and Sewer Service Applications Processed
	3 YTD: 17	Sewer Overflows >10,000 gallons (major spill)
	6 YTD: 25	Sewer Overflows <10,000 gallons (minor spill)
500	People Reached by PEO Staff	
Airport Services	42,520	Aircraft Operations YTD
FID Transportation Operations	93	Potholes Repaired
	31 Tons	Litter Picked Up
	18	Traffic Signals Maintained
Development Permits	4	Building Permits Under Review
	14	Building Permits Issued this Quarter
	30	2020 Building Permits Issued to Date

Big Creek Rain Report

By: Anna Skipper

Objective

The purpose of this report is to 1) investigate the basin response to the storm on 9/16/20 and 2) compare that response to the storm on 2/6/20.

Note

There are several differences between these two storms that complicate comparing them directly. These factors include: differences in rainfall and rainfall pattern; differences in storm start and end times; differences in season (winter vs. summer); and differences in water table and previous weather conditions. We can provide numbers for net I&I reductions, changes in peaking factor, and basin response, but we can't definitively attribute these changes to repair and rehabilitation work alone. Lastly, the September data is preliminary and has not been QA/QC-ed.

Rain

In the case of sites like BC19 where the net Inflow & Infiltration (I&I) dramatically increased, this is likely, as strange as it sounds, due to the successful reduction of I&I at upstream sites BC19A and BC70A. If the site doesn't fill up with flow from upstream, then there is more room for additional flow to enter the system.

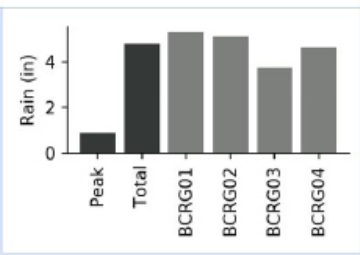
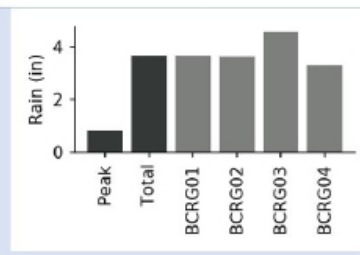
Net I&I Reduction Data

FM	2/6/2020		9/16/2020		I&I Reduction
	PF	I&I (MG)	PF	I&I (MG)	
BC19	2.36	0.60	2.47	5.31	786.2%
BC19A	3.08	14.41	3.78	9.53	-33.9%
BC70A	3.07	5.73	4.14	1.37	-76.2%

The storm on 9/16 saw more rain than on 2/6, somewhere between 1 – 1.5 additional inches depending on the measuring site. Both storms began late Wednesday night, peaked Thursday morning, and ended by Thursday afternoon. The peak rainfall time on 9/17 was between 5 and 6 AM, whereas peak rainfall on 2/6 was between 9 and 10 AM. Both of these times fall during the maximum flows seen in the flow monitors during dry weather, which exacerbates the capacity issue during the storms. The morning is when our sewer lines are most likely to be at their most full. In that sense, these kinds of large overnight storms are likely our worst scenario in terms of sewer performance.

Big Creek Rain Guage Data from Storm Events

Measurement	9/16/2020 (5-6 AM)	2/6/2020 (9-10 AM)
Peak (in/hr)	0.89	0.81
Mean Total (in)	4.82	3.67
BCRG01 (in)	5.31	3.67
BCRG02 (in)	5.11	3.63
BCRG03 (in)	3.75	4.60
BCRG04 (in)	4.65	3.29

The gist of the matter is that we are showing improvements in our sanitary sewer performance during larger, more intense storms. There are still areas that require work but we are moving in the right direction.

Little River Construction Update

By: Timothy Mullen

Construction of the expansion of the Little River Wastewater Reclamation Facility is close to completion with the exception of the last Aerzen blower, final grading, asphalt paving and miscellaneous punch list items. All demolition of existing structures and the modifications to both of the existing post anoxic bio-basins are complete, and the new mixers are ready to be tested.

The Contractor has installed the membrane system and all auxiliary equipment. The membrane system meets compliance. Testing of the blower that adds air to the membrane system is scheduled mid-November. The facility is able to process the higher flow rates, however we are still encountering technical problems with the membrane influent gates. The Contractor has completed the construction of the south and north bio-basins. Testing of the two post-anoxic mixers and the last blower still need to be performed before substantial completion and final acceptance.

Suez is the provider of the membrane system, which is similar to the system installed at Johns Creek Environmental Campus but utilizing the latest technology. The plant has been designed to be automated and manned 24 hours per day. The construction project is now expected to reach completion at the end of November.



Seasonal Taste and Odor Changes in Water Supply

By: Patrick Person

Recently, some North Fulton County customers have experienced taste and odor issues associated with the water from the distribution system. According to the calls received, the taste and odor could be described as musty or earthy. Although unpleasant for those affected, we want to reassure our customers the water remains safe to drink, cook with and to take baths.

The suspected cause is a natural seasonal phenomenon called lake turnover or inversion. When the temperatures drop in the fall and warmer surface water cools, it can drop to a lower level and the lower level water rises, creating a mixing effect of the water body. Algae accumulated in the lower level can release chemical compounds which are not harmful, but can produce taste and odor issues. While this temporary smell and taste may not be pleasing to the nose or palette, the water still meets our high safety standards for drinking water.

The water distributed to the North Fulton County Water System customers is provided by the Atlanta Fulton County Water Plant. The Plant takes raw water from the Chattahoochee River, stores it in a large reservoir, treats the water and pumps it into the North Fulton County Water Distribution System, and the City of Atlanta distribution system. The source water for the plant is the Chattahoochee River which is fed by Lake Lanier.

The Tom Lowe Water Plant operators are taking steps to address this issue by adding activated carbon and copper sulfate in the raw water reservoir. This action will improve the odor and taste. Our Fulton County Operations crew is also flushing the distribution system to clear-out the odorous water. Although we are working diligently to correct this situation, the process could take a few weeks. If you have any questions, please call 404-612-9429.

Below are several links for more information regarding lake turnover and how other utilities have addressed this issue.

<https://www.cleanlakesalliance.org/lake-turnover/>

<https://www.nationalgeographic.org/media/lake-turnover/>

<https://www.fondriest.com/news/city-officials-fight-taste-odor-issues-drinking-water-win.htm>

Merk Road Bank Stabilization Project

By: Charles Nezianya, Sam Tamakloe, and Brandon LaFleur

This project features creek bank stabilization and rehabilitation of two 48 inch sewer pipe concrete pier supports. The creek bank was eroded and the concrete sewer pipe pier supports were partially washed off and unstable. If the rehabilitation was not completed and it was left to remain in its compromised condition there would have been a high probability for a potential pipe collapse and cause a major sewer spill in the creek. The pipe length crossing the creek is approximately 398 feet from manhole to manhole and about 80 feet from embankment to embankment. The project started on May 25, 2020 and was completed on July 3, 2020. Before and after pictures of the project are found below.

Before Creek Bank Stabilization and Pier Rehabilitation



After Creek Bank Stabilization and Pier Rehabilitation



NOVEMBER IS FOG PREVENTION MONTH

During the month of November, the Fulton County Department of Public Works invite you to celebrate FOG prevention month! As we prepare for the holiday season, remember to Think at The Sink!



F.O.G. stands for fats, oils, and grease. These materials solidify as they cool, which can cause major problems, including sewer blockages and backups in your home. By Properly disposing of F.O.G. in the trash can or at a recycling center, we can prevent water pollution.



To prevent clogged pipes, remember these 3 steps:

1. Allow your F.O.G. to Cool before disposing.
2. Collect your F.O.G. using a funnel or F.O.G. scraper. Scrape your F.O.G. into a container for proper disposal in the trash.
3. Cap your disposable container to prevent spilling.

Important Contacts for Employees

For payroll, leave, or overtime questions: Cherylyn Griffin 404.612.7444	For pension (old plan) questions: Finance Department 404.612.7600
For direct deposit, credit union, MARTA, or tax questions: Maxine Wright 404.612.7724	For employee benefits questions: Finance Department 404.612.7605
For 457b questions: Tomekia Mance 404.612.7668	For ADA questions: Nadine Oka 404.612.7390
For 401a questions: Mass Mutual 800.743.5274	

Fulton County Board of Commissioners

General Number 404-612-8200

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- Vice-Chair Marvin S. Arrington Jr. (District 5)
- Commissioner Liz Hausmann (District 1)
- Commissioner Bob Ellis (District 2)
- Commissioner Lee Morris (District 3)
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- Commissioner Joe Carn (District 6)